



# Solar Photovoltaic Case Study

## Roger Road Reclaimed Water Reservoir 2550 West Sweetwater Drive

### **TECHNICAL SPECIFICATIONS:**

- Installed November 2009.
- 110.25 kW DC; 88.2 kW AC.
- 525 Kyocera 210W KD210GX-LP polycrystalline PV panels.
- 1 Satcon PVS-100 (100kW) Inverter.
- Greenhouse gas reductions-approximately 179.8 metric tons CO<sub>2</sub>/year.



### **PROJECT DESCRIPTION:**

- Array installed on reservoir deck.
- Single axis TTI tracking system follows sun to maximize output.
- Output of 211,576 kWh/year; approximately 8% of adjacent building load.
- SPG Solar, Inc. guarantees electrical output for 5 years and provides maintenance services for 10 years.
- Wireless reporting monitoring system by Fat Spaniel.
- System power production and other details available 24/7 online at <http://tiny.cc/eJ3zq>.

### **FINANCIAL DETAILS:**

- Project paid for through an allocation of Clean Renewable Energy Bonds (CREBs).
- 13 year payback period at 0% interest.
- TEP rebates and savings to pay off bonds.
- Total design and installation costs - \$848,385.



- For additional information go to: <http://www.tucsonaz.gov/energy/>